

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Crawford Laboratories
Attn: Mr. David Schmetterer
4165 South Emerald Avenue
Chicago, Illinois 60609-2646

| | |
|---|--|
| <u>Application No.:</u> 05090017 | <u>I.D. No.:</u> 031600GRD |
| <u>Applicant's Designation:</u> | <u>Date Received:</u> September 8, 2005 |
| <u>Subject:</u> Manufacturing Polymer Floor Coatings | |
| <u>Date Issued:</u> November 6, 2006 | <u>Expiration Date:</u> November 6, 2011 |
| <u>Location:</u> 4165 South Emerald Avenue, Chicago, 60609-2646 | |

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of a polymer floor coating manufacturing operation and a natural gas-fired boiler pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., volatile organic material (VOM) to less than 100 tons per year, individual hazardous air pollutants (HAPs) to less than 10 tons per year, and a combination of HAPs to less than 25 tons per year). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To limit the emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. This federally enforceable state operating permit is issued based on 35 IAC Part 218 Subpart AA not being applicable due to the production of paint or ink formulations which contain less than 10% (by weight) water, and ink formulations not containing as the primary solvents water, Magie oil or glycol being equal to or less than 500,000 gallons per year.

3. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
4. Emissions and operation of the polymer floor coating manufacturing operation, including mixing and filling stations and all clean-up operations shall not exceed the following limits:

| VOM Used | | Pigment Used | | Emission Factor | Pollutant | Emissions | |
|----------|--------|--------------|--------|-----------------------|-----------|-----------|--------|
| (T/Mo) | (T/Yr) | (T/Mo) | (T/Yr) | (% of VOM or Pigment) | | (T/Mo) | (T/Yr) |
| 50 | 500 | | | 3.4% | VOM | 1.7 | 17.0 |
| | | 59 | 590 | 1.0% | PM | 0.9 | 5.9 |
| | | | | | Combined | | |
| | | | | | HAPs | 1.7 | 17.0 |
| | | | | | Single | | |
| | | | | | HAP | 0.8 | 8.0 |

These limits define the potential emissions and are based on 2004 material usage, AP-42, Section 6.4, Paint Manufacturing, and USEPA approved emission factor from the "Emission Inventory Improvement Program (EIIP), Vol. II, Ch. 8: Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities", and HAP information in the permit application. Compliance shall be determined from a running total of 12 months of data.

5. Emissions and operation of the two natural gas-fired boilers and all other natural gas-fired equipment shall not exceed the following limits:

| Natural Gas Usage | Pollutant | Emission Factor | Emissions | |
|-------------------|-----------------|-----------------|--------------|-------------|
| (mmscf/Yr) | | (Lb/mmscf) | (Tons/Month) | (Tons/Year) |
| 10 | NO _x | 100 | 0.05 | 0.5 |
| | CO | 84 | 0.04 | 0.42 |
| | VOM | 5.5 | 0.003 | 0.03 |
| | PM | 7.6 | 0.004 | 0.04 |

These limits are based on standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

6. This permit is issued based on negligible emissions of VOM and HAPs from each of the 2 batch reactors. For this purpose, emissions from each reactor shall not exceed nominal rates of 0.1 lb/hour and 0.44 tons/year for a total of 0.9 tons per year.

- 7a. This permit is issued based on all storage tanks having submerged loading pipes, pursuant to 35 Ill. Adm. Code 218.122b.
- b. This permit is issued based on negligible emissions of VOM and HAPs from all storage tanks. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- 8a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
- i. Pigment usage (tons/month and tons/year);
 - ii. Usage of VOM and/or HAP containing materials (tons/month and tons/year);
 - iii. VOM and/or HAP contents of materials (weight %);
 - iv. Natural gas usage (mmscf/month and mmscf/year); and
 - v. Monthly and annual VOM, PM and HAP emissions with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
10. Two (2) copies of required reports and notifications shall be sent to:
- Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
- and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Page 4

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RBS:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the coating manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons per year of volatile organic material (VOM), 10 tons per year of individual hazardous air pollutants (HAPs), and 25 tons per year of a combination of HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

| <u>Process</u> | <u>VOM</u> <u>(T/Yr)</u> | <u>NO_x</u> <u>(T/Yr)</u> | <u>CO</u> <u>(T/Yr)</u> | <u>HAPs</u> | | <u>PM</u> <u>(T/Yr)</u> |
|------------------------|-----------------------------|--|----------------------------|--------------------------------|----------------------------------|----------------------------|
| | | | | <u>Single</u> <u>(T/Yr)</u> | <u>Combined</u> <u>(T/Yr)</u> | |
| Tanks and Reactors | 1.34 | | | 1.34 | 1.34 | |
| Coating Manufacturing | 17.00 | | | 8.00 | 17.00 | 5.9 |
| Natural Gas Combustion | <u>0.03</u> | <u>0.5</u> | <u>0.42</u> | | | <u>0.04</u> |
| Totals | 18.37 | 0.5 | 0.42 | 9.34 | 18.34 | 6.00 |

RBS:psj